



Your Personal Exams Guide



NDA



CDS



SSC CGL



CBSE UGC NET



IAS



SSC CHSL



CTET



MPSC



AFCAT



CSIR UDC NET



IBPS PO



UP POLICE



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IBPS RRB



IBPS CLERK



IES



UPSC CAPF



SSC Stenogr..



RRB NTPC



SSC GD



RBI GRADE B



RBI Assistant



DSSSB

SSC CHSL Previous Paper 53 (Held On: 26 March 2018 Shift 1)

Total Time: 1 Hour

Total Marks: 200

Instructions

Sl No.	Section Name	No. of Question	Maximum Marks	Negative Marks	Positive Marks
1	English Language	25	50	0.5	2
2	General Intelligence	25	50	0.5	2
3	Quantitative Aptitude	25	50	0.5	2
4	General Awareness	25	50	0.5	2

- 1.) A total of 60 minutes is allotted for the examination.
- 2.) The server will set your clock for you. In the top right corner of your screen, a countdown timer will display the remaining time for you to complete the exam. Once the timer reaches zero, the examination will end automatically. The paper need not be submitted when your timer reaches zero.
- 3.) There will, however, be sectional timing for this exam. You will have to complete each section within the specified time limit. Before moving on to the next section, you must complete the current one within the time limits.

English Language

1. In the following question, four words are given out of which one word is correctly spelt. Select the correctly spelt word. (+2, -0.5)

- a. imparsonators
- b. impersonaters
- c. impersonators
- d. imparsonaters

2. The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph. (+2, -0.5)

Contrast this with

A-the attitude of the general

B-public in the advanced

C-countries towards senior citizens

- a. ABC
- b. CBA
- c. CAB
- d. BCA

3. In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement". (+2, -0.5)

We, on the other hand, (is amused) by the number of channels it had to offer.

- a. was amused
- b. were amused
- c. were amusing
- d. no improvement

-
4. In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement". (+2, -0.5)

The news (had appeared) irrelevant at that time, but now it directly affects us.

- a. have appeared
- b. is appeared
- c. had appears
- d. no improvement

-
5. In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence. (+2, -0.5)

Give strength or energy to

- a. Narcoleptic
- b. Invigorate
- c. Prostrate

d. Exasperate

6. In the following question, out of the four alternatives, select the alternative which is the best substitute of the phrase. (+2, -0.5)

A transcendent state in which there is neither suffering, desire, nor sense of self

- a. Woe
 - b. Nirvana
 - c. Depression
 - d. Despondency
-

7. In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase. (+2, -0.5)

As high as a kite

- a. Intoxicated with alcohol
 - b. Feel light after meditation
 - c. Fell jubilant after victory
 - d. Behave arrogantly
-

8. In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase. (+2, -0.5)

Pull the plug

- a. Behave greedily and take the most of the shared things for oneself.
- b. Do something to stop the persistent losses.
- c. Prevent something from happening or continuing.
- d. Play loud irritating music.

9. In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. (+2, -0.5)

If there is a subject of really _____ interest and utility, it is the art of writing and speaking one's own language _____. It is the basis of culture, as we all know; but it is infinitely more _____ that, it is the basis of business. _____ salesman can sell anything unless he can explain the merits of his goods in effective language, or can write _____ advertisement equally effective, or present his ideas, and the facts, in a letter.

can write _____ advertisement equally

a. a

b. an

c. the

d. it

10. In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. (+2, -0.5)

If there is a subject of really _____ interest and utility, it is the art of writing and speaking one's own language _____. It is the basis of culture, as we all know; but it is infinitely more _____ that, it is the basis of business. _____ salesman can sell anything unless he can explain the merits of his goods in effective language, or can write _____ advertisement equally effective, or present his ideas, and the facts, in a letter.

of business. _____ salesman can sell

- a. None
- b. Never
- c. Neither
- d. No

-
11. In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. (+2, -0.5)

If there is a subject of really _____ interest and utility, it is the art of writing and speaking one's own language _____. It is the basis of culture, as we all know; but it is infinitely more _____ that, it is the basis of business. _____ salesman can sell anything unless he can explain the merits of his goods in effective language, or can write _____ advertisement equally effective, or present his ideas, and the facts, in a letter.

is infinitely more _____ that, it is the basis

- a. then
- b. such

c. so

d. than

12. In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. (+2, -0.5)

If there is a subject of really _____ interest and utility, it is the art of writing and speaking one's own language _____. It is the basis of culture, as we all know; but it is infinitely more _____ that, it is the basis of business. _____ salesman can sell anything unless he can explain the merits of his goods in effective language, or can write _____ advertisement equally effective, or present his ideas, and the facts, in a letter.

One's own language _____. It is the basis

- a. Effective
- b. Effectiveness
- c. Effectivity
- d. Effectively

13. In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. (+2, -0.5)

If there is a subject of really _____ interest and utility, it is the art of writing and speaking one's own language _____. It is the basis of culture, as we all know; but it is infinitely more _____ that, it is the basis of business. _____ salesman can sell anything unless he can explain the merits of his goods in effective language, or can write _____

advertisement equally effective, or present his ideas, and the facts, in a letter.

Subject of really _____ interest and utility

- a. Universe
- b. Universally
- c. Universality
- d. Universal

14. In the following question, a word has been written in four different ways out of which only one is correctly spelt. Select the correctly spelt word. (+2, -0.5)

- a. Intrefrence
- b. Interfrence
- c. Interfrrence
- d. Interference

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15. A sentence has been given in Direct/Indirect Speech. Out of the four given alternatives, select the one which best expresses the same sentence in Indirect/Direct Speech. (+2, -0.5)

He says, "I am a little bit afraid."

- a. He was a little bit afraid, he said
- b. He said he was afraid
- c. He says that he is a little bit afraid

d. He says that he was a little bit afraid

16. A sentence has been given in Active/Passive Voice. Out of the four given alternatives, select the one which best expresses the same sentence in Passive/Active Voice. (+2, -0.5)

The people considered him an outcast.

- a. He was an outcast for the people
 - b. He is considered by the people as an outcast
 - c. He was considered an outcast by the people
 - d. He was considered as an outcast by the people
-

17. Rearrange the parts of the sentence in correct order. (+2, -0.5)

Daily pricing

P: is being seen as a ploy

Q: government to escape any political backlash

R: to increase prices while allowing the

- a. RQP
 - b. PRQ
 - c. QPR
 - d. PQR
-

18. In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word. (+2, -0.5)

Allergic

- a. Affected
 - b. Immune
 - c. Sensitive
 - d. Afraid
-

19. In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word. (+2, -0.5)

Clamorous

- a. Noisy
 - b. Confusion
 - c. Disturbance
 - d. Suppression
-

20. Out of the four alternatives, choose the one which best expresses the meaning of the given word. (+2, -0.5)

Mundane

- a. Bounteous
- b. Heavenly

- c. Exciting
 - d. Humdrum
-

21. In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word. (+2, -0.5)

Pithy

- a. Verbose
 - b. Brief
 - c. Lengthy
 - d. Unabridged
-

22. In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option. (+2, -0.5)

A thorough search at _____'s home produced stolen items.

- a. thief
 - b. their
 - c. him
 - d. his
-

23. In The following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option. (+2, -0.5)

Priya sat _____ a sofa at the Opera.

- a. in
- b. under
- c. into
- d. on

-
24. In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the approximate option. If a sentence is free from, select 'No Error'. (+2, -0.5)

The first demonstration of the live (1)/ transmission of images were given by Georges Rignoux (2)/ and A. Fourier in Paris in 1909. (3)/ No error (4)

- a. 1
- b. 2
- c. 3
- d. 4

-
25. In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'. (+2, -0.5)

A rainbow is caused by reflection, refraction, and dispersion (1)/ of light among water droplets resulting in a (2)/ spectrum of light appearing in the sky. (3)/ No error (4).

- a. 1

b. 2

c. 3

d. 4

Prepp

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General Intelligence

26. In the following question, select the related word pair from the given alternatives. (+2, -0.5)

Paper : Pulp :: ? : ?

- a. Sack : Jute
- b. Car : Vehicle
- c. Cloth : Garment
- d. Gold : Jewellery

-
27. In the following question, select the related number pair from the given alternatives. (+2, -0.5)

48 : 41 :: ? : ?

- a. 92 : 87
- b. 74 : 67
- c. 68 : 63
- d. 84 : 75

-
28. In the following question, select the related letter/letters from the given alternatives. (+2, -0.5)

DLQ : XFK :: RGM : ?

- a. MAH

- b. LAG
 - c. MBG
 - d. LBH
-

29. In the following question, select the odd word from the given alternatives. (+2, -0.5)

- a. Valley
 - b. Lake
 - c. Ocean
 - d. Creek
-

30. In the following question, four number pairs are given. The number on left side of (–) is related to the number on the right side of (–) with some Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives. (+2, -0.5)

- a. 16 – 5
 - b. 24 – 6
 - c. 32 – 8
 - d. 88 – 22
-

31. In the following question, select the odd letter/letters from the given alternatives. (+2, -0.5)

- a. HKN

- b.** FJM
 - c.** ORU
 - d.** CFI
-

32. Arrange the given words in the sequence in which they occur in the dictionary. **(+2, -0.5)**

- 1. Frantic
- 2. Fraud
- 3. Fountain
- 4. Frank
- 5. Frail

- a.** 35412
 - b.** 24153
 - c.** 52314
 - d.** 54321
-

33. In the following question, select the missing number from the given series. **(+2, -0.5)**

43, 58, 88, 133, ?, 268

- a.** 163
- b.** 218
- c.** 203

d. 193

34. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series. (+2, -0.5)

FJ, GK, HL, ?, JN

a. LN

b. IM

c. HN

d. HL

35. Among four boys, age of Ashish is thrice the age of Varun. Age of Arvind is $\frac{1}{2}$ of the age of Varun. Amit is 8 years elder to Varun, but 8 years younger to Ashish. Who is the second eldest? (+2, -0.5)

a. Ashish

b. Varun

c. Arvind

d. Amit

36. From the given alternatives, select the word which CANNOT be formed using the letters of the given word. (+2, -0.5)

Travelling

a. Track

- b. Van
- c. Rain
- d. Train

37. In a certain code language, "TUBE" is written as "202125" and "PINCH" is written as "1691438". How is "MARC" written in that code language? (+2, -0.5)

- a. 121183
- b. 131184
- c. 131183
- d. 141162

38. In a certain code language, '-' represents '+', '+' represents 'x', 'x' represents '÷' and '÷' represents '-'. Find out the answer to the following question. (+2, -0.5)

$$8 \div 6 - 5 + 70 \times 10 = ?$$

- a. 10
- b. 37
- c. 9
- d. 17

39. The following equation is incorrect. Which two signs should be interchanged to rectify the equation? (+2, -0.5)

$$16 \div 6 + 35 \times 9 - 15 = 31$$

- a. + and $\div$
 - b. + and $\times$
 - c. $\div$ and $-$
 - d. and +
-

40. If $707 = -10$, $505 = -10$ and $408 = -5$, then find the value of $102 = ?$ (+2, -0.5)

- a. -5
 - b. -10
 - c. 16
 - d. 50
-

41. Which of the following terms follows the trend of the given list? (+2, -0.5)

YXYXZXY, YXYZXYXY, YZXYXYXY, YXYXYXZY, YXYXZYXY, _____.

- a. ZYXYXYXY
 - b. YXYXZXY
 - c. YXYZXYXY
 - d. YXZYXYXY
-

42. A brother and sister leave home for school. The brother goes 0.5 km East, then turns right and goes 3.5 km and reaches his school. The sister goes 2.5 km North, then 1 km West, then turns left and goes 6 km and reaches (+2, -0.5)

her school. Where is the brother's school with respect to the sister's school?

- a. 1.5 km East
- b. 0.5 km East
- c. 0.5 km West
- d. 1.5 km West

43. In the question, two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements. (+2, -0.5)

Statement I: Some beverages are juices.

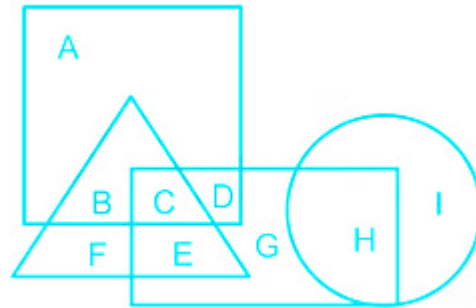
Statement II: No drinks are beverages.

Conclusion I: Some juices are drinks.

Conclusion II: No beverages are juices.

- a. Only conclusion I follows.
- b. Only conclusion II follows.
- c. Both conclusions I and II follow.
- d. Neither conclusion I nor conclusion II follows.

44. In the following figure, rectangle represents Lawyers, circle represents Athletes, triangle represents Gardeners and square represents Mothers. Which set of letters represents Lawyers who are either Athletes or Gardeners? (+2, -0.5)



- a. DG
- b. CDH
- c. BFI
- d. HCE

45. Series is given with one term missing. Select the correct alternative from the given ones that will complete the series. (+2, -0.5)

RLN, SNQ, TPT, URW, ?

- a. WSA
- b. VUA
- c. WTA
- d. VTZ

46. In the following question, select the missing number from the given series. (+2, -0.5)

42, 47, 52, 57, ?, 67

- a. 62
- b. 65

c. 63

d. 60

47. In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives. (+2, -0.5)

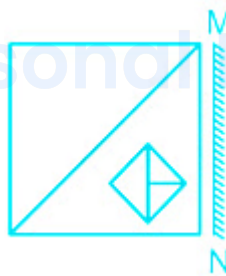
a. (7, 34, 13)

b. (12, 59, 23)

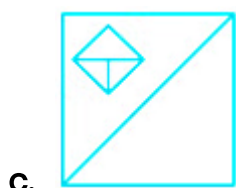
c. (17, 84, 35)

d. (11, 54, 21)

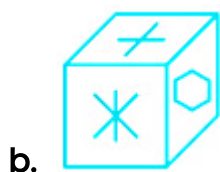
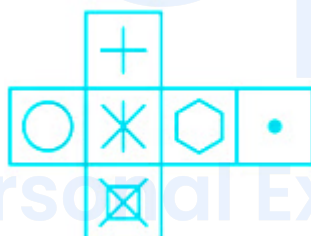
48. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure? (+2, -0.5)



a.



49. Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure? (+2, -0.5)





50. A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are resented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-I are numbered from 0 to 4 and that a Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and row and next by its column, for example, 'J' can be represented by 42, 34 etc and 'U' can be represented by 55, 96 etc. Similarly, you have to identify the set for the word "SEND". (+2, -0.5)

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Matrix-I						Matrix-II					
	0	1	2	3	4		5	6	7	8	9
0	K	E	A	G	A	5	U	X	P	O	Z
1	L	C	G	I	C	6	S	W	V	P	O
2	C	L	E	I	L	7	P	T	N	W	T
3	I	G	B	H	J	8	Z	Z	W	N	Y
4	G	M	J	D	B	9	T	S	U	R	O

a. 43, 75, 12, 69

b. 65, 22, 77, 43

c. 21, 65, 12, 89

d. 13, 96, 30, 78

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Quantitative Aptitude

51. Find the number of prime factor of 1024. (+2, -0.5)

- a. 9
- b. 12
- c. 10
- d. 11

52. Which of the following is NOT prime number? (+2, -0.5)

- a. 341
- b. 571
- c. 331
- d. 251

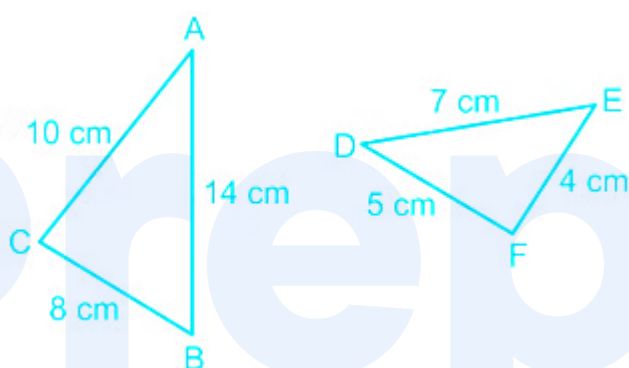
53. What is the value of $x^4 + y^4$ when the value of $x^3 + y^3 = 8$ and $x + y = 2$? (+2, -0.5)

- a. 2
- b. 8
- c. 32
- d. 16

54. Determine the value of $\left(y - \frac{1}{y}\right)^2$ when $y^4 + \frac{1}{y^4} = 34$ (+2, -0.5)

- a. 3
- b. 2
- c. 1
- d. 4

55. Which of the following condition is TRUE about the similarity of triangle ABC and DEF given below? (+2, -0.5)



- a. $\angle A = \angle D, \angle B = \angle E, \angle C = \angle F$
- b. $\angle A = \angle E, \angle B = \angle D, \angle C = \angle F$
- c. $\angle A = \angle F, \angle B = \angle D, \angle C = \angle E$
- d. None of these

56. The radius of the circle is 14 cm, an arc is subtend an angle 54 degree at center. Find the length of the arc (in cm). (+2, -0.5)

- a. 14.2
- b. 12.8
- c. 13.2

d. 13.8

57. If 5% of $(P + Q) = 20\%$ of $(P - Q)$, then P is what percentage of Q? (+2, -0.5)

a. 133.33

b. 150

c. 166.66

d. 171.33

58. What number should be added to each of 4, 16, 18 and 58 so that the resulting numbers will be in proportion in the given order? (+2, -0.5)

a. 2

b. 1

c. 3

d. 4

59. In 250 litres mixture of soda and water the ratio of amount of soda to that of water is 7 : 18. In order to make this ratio 2 : 3, how many more litres of soda should be added? (+2, -0.5)

a. 50

b. 45

c. 42.5

d. 37.5

60. The average of three numbers is 40. The first number is $\frac{4}{3}$ of the third number. If the third number is 20 less than the second number, then what is the value of the second number? (+2, -0.5)

- a. 50
- b. 60
- c. 10
- d. 20

61. A sum of Rs. 4000 becomes Rs. 6000 in 1 year at a certain rate of compound interest. What will be the sum (in Rs.) after 4 years? (+2, -0.5)

- a. 19500
- b. 20250
- c. 12000
- d. 16250

62. Mukesh sells two shirts. The cost price of the first shirt is equal to the selling price of the second shirt. The first shirt is sold at a profit of 30% and the second shirt is sold at a loss of 30%. What is the ratio of the selling price of the first shirt to the cost price of the second shirt? (+2, -0.5)

- a. 91 : 100
- b. 100 : 91
- c. 50 : 31

d. 31 : 50

63. The marked price of an article is 60% more than its cost price. What maximum discount percentage can be offered by the shopkeeper to sell his article at no profit or no loss? (+2, -0.5)

a. 37.5

b. 25

c. 62.5

d. 50

64. If 169 is subtracted from the square of a number, then the result obtained is 7056. What is the number? (+2, -0.5)

a. 78

b. 87

c. 85

d. 75

65. Working 5 hours a day, Shivam can read a book in 24 days. How many hours a day should he work so as to finish the same work in 8 days? (+2, -0.5)

a. 21

b. 18

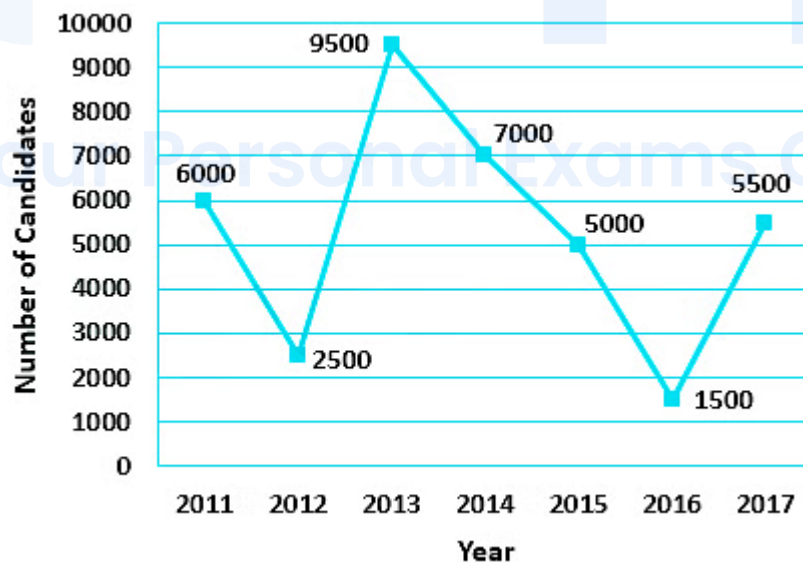
c. 12

d. 15

66. Two trains are moving in opposite directions with the same speed. If the length of each train is 120 metres and they cross each other in 12 seconds, then what is the speed (in km/hr) of each train? (+2, -0.5)

- a. 45
b. 80
c. 36
d. 60

67. **Direction:** The line graph shows the number of candidates who applied for admission to a certain college. Study the diagram and answer the following questions. (+2, -0.5)

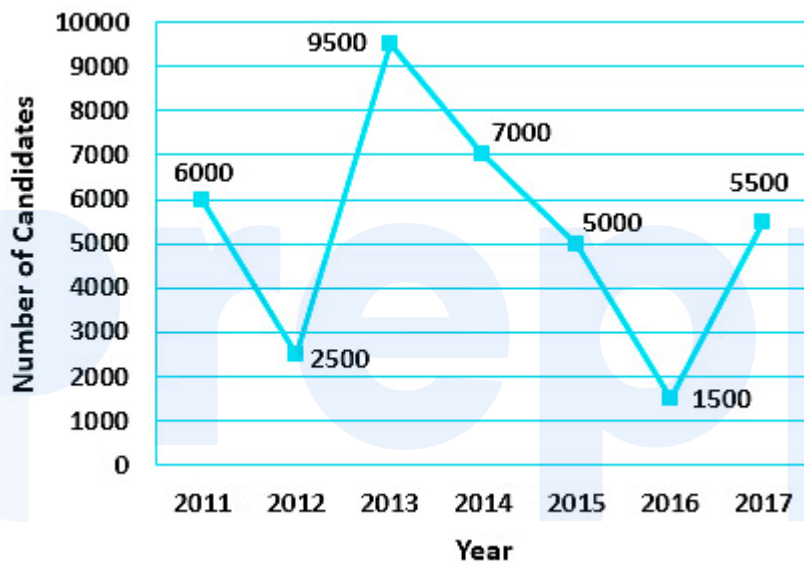


In which year were applications greater than that of the previous year?

- a. 2012

- b. 2015
- c. 2013
- d. 2014

68. **Direction:** The line graph shows the number of candidates who applied for admission to a certain college. Study the diagram and answer the following questions. (+2, -0.5)

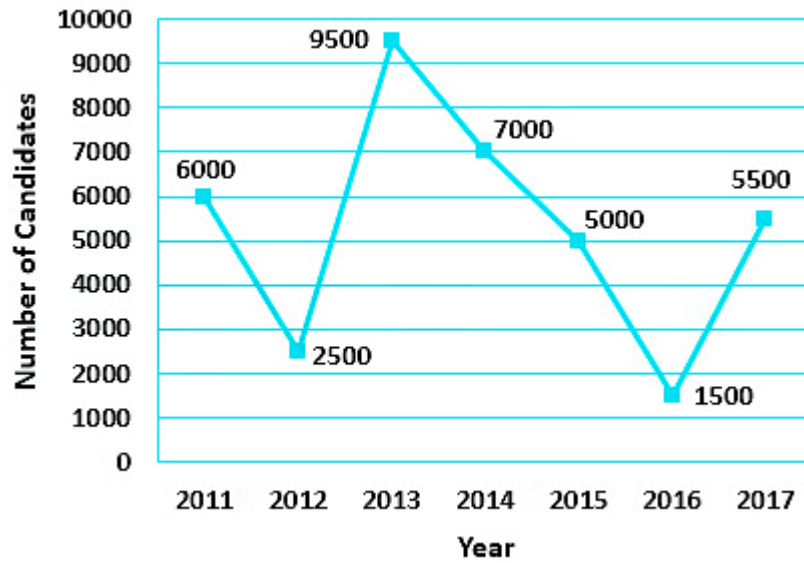


What was the difference in applications between the years 2017 and 2012?

- a. 3000
- b. 3500
- c. 2000
- d. 2500

69. **Direction:** The line graph shows the number of candidates who applied for admission to a certain college. Study the diagram and answer the (+2, -0.5)

following questions.

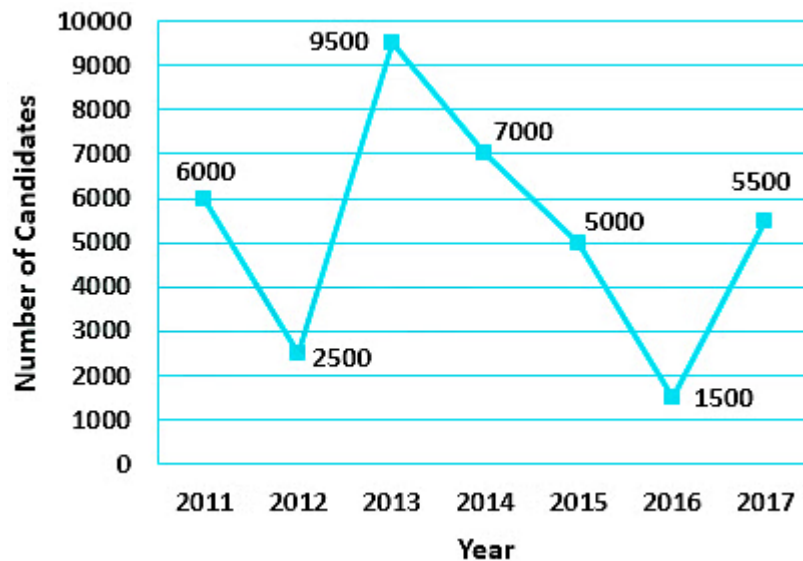


Applications in 2014 were greater than that in 2015 by _____.

- a. 50%
- b. 28.5%
- c. 40%
- d. 20%

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70. **Direction:** The line graph shows the number of candidates who applied for admission to a certain college. Study the diagram and answer the following questions. (+2, -0.5)



If each applicant has to submit Rs. 500 as application fees, how much did the college collect (in Rs. lakhs) as application fees in the last three years?

- a. 50
- b. 5
- c. 6
- d. 60

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71. The area of a square is 72.25 cm^2 . Find its perimeter (in cm). (+2, -0.5)

- a. 88
- b. 34
- c. 44
- d. 68

72. Find the circumference (in cm) of a circle of radius 17.5 cm. (+2, -0.5)

- a. 76
- b. 140
- c. 38
- d. 110

73. The curved surface area and the diameter of a right circular cylinder are 352 cm² and 14 cm respectively. Find its height (in cm). (+2, -0.5)

- a. 8
- b. 11
- c. 9
- d. 10

74. ΔXYZ is right angled at Y. If $m\angle Z = 60^\circ$, then find the value of $(\cot X - 1/3)$. (+2, -0.5)

- a. $(3\sqrt{3} - 1)/3$
- b. $(2\sqrt{3} - \sqrt{6})/2\sqrt{2}$
- c. $-5/3$
- d. $(2 - \sqrt{3})/2\sqrt{3}$

75. ΔPQR is right angled at Q. If $\sin P = 12/13$, then what is the value of $\tan R$? (+2, -0.5)

- a. $13/12$
- b. $5/12$
- c. $5/13$
- d. $13/5$

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General Awareness

76. The marginal propensity to consume, lies between _____. (+2, -0.5)
- a. 0 to Infinity
 - b. 0 to 1
 - c. 1 to Infinity
 - d. 0 to 10
-
77. In India, which of the following is regulated by the Forward Markets Commission? (+2, -0.5)
- a. Currency Futures Trading
 - b. Commodities Futures Trading
 - c. Equity Futures Trading
 - d. Both Commodities Futures and Financial Futures Trading
-
78. Which of the following ruling dynasty's capital is NOT correctly matched? (+2, -0.5)
- a. Pratihara - Kannauj
 - b. Chalukya - Tanjore
 - c. Sen - Lakhnauti
 - d. Pallava - Kanchi
-

79. Which of the following land revenue arrangement is called 'Todarmal System'?

(+2, -0.5)

- a. Kankut System
- b. Nasaq System
- c. Zabti System
- d. GallaBakshi System

80. What is the approximate length of the 'Suez Canal'?

(+2, -0.5)

- a. 193 Km
- b. 106.5 Km
- c. 178 Km
- d. 64.8 Km

81. The 'Ukai' project is situated _____.

(+2, -0.5)

- a. On Narmada river in Madhya Pradesh
- b. On Tapti river in Madhya Pradesh
- c. On Tapti river in Gujarat
- d. On Sabarmati river in Gujarat

82. Who was the exponent of 'Lokayata Darshana'?

(+2, -0.5)

- a. Badarayan
 - b. Ramanuja
 - c. Charvak
 - d. Kapil
-

83. What was the theme of the 5th Global Conference on Cyber Space (GCCS), held in November, 2017? (+2, -0.5)

- a. Cyber4All: An Inclusive, Sustainable, Developmental, Safe and Secure Cyberspace.
 - b. Cyber for Better Life
 - c. Cyber for World
 - d. Cyber for Better Future
-

84. Who among the following is NOT a Miss World? (+2, -0.5)

- a. Sushmita Sen
 - b. Diana Hayden
 - c. Yukta Mookhey
 - d. Manushi Chhillar
-

85. Which is the chief crop of Sri Lanka in which the country is self-sufficient? (+2, -0.5)

- a. Sugarcane

- b. Rice
 - c. Cocoa
 - d. Rubber
-

86. In a nuclear reactor, 'cadmium rods' are used as which of the following? (+2, -0.5)

- a. Controller
 - b. Lubricant
 - c. Fuel
 - d. Moderator
-

87. Which of the following is used in gunpowder? (+2, -0.5)

- a. Potassium Bromide
 - b. Potassium Nitrate
 - c. Monopotassium Tartrate
 - d. Potassium Sulphate
-

88. According to Indian Constitution, there are three organs of government. Which among the following is/are NOT an organ/organs of it? (+2, -0.5)

- I. The legislature
- II. The Media
- III. The Judiciary

- a. Only I and III
 - b. Only III
 - c. Only II
 - d. Only I
-

89. The sperms formed in testes are delivered through the _____, which unites with a tube coming from the urinary bladder. (+2, -0.5)

- a. urethra
 - b. ureter
 - c. seminal vesicle
 - d. vas deferens
-

90. Which of the following is NOT a constituent of 'Xylem'? (+2, -0.5)

- a. Companion cells
 - b. Vessels
 - c. Xylem parenchyma
 - d. Tracheids
-

91. In November 2017, under the Credit Linked Subsidy Scheme (CLSS) increase in the carpet area for Middle Income Group I (MIG-I) was approved. The carpet area for MIG-I will be increased to _____. (+2, -0.5)

- a. 150 square metre

- b. 120 square metre
 - c. 100 square metre
 - d. 110 square metre
-

92. Which country is constructing a DNA sequencing platform to store ethnic data of about 80 million people? (+2, -0.5)

- a. China
 - b. United States of America
 - c. Indonesia
 - d. India
-

93. As per a report released by the Bank of America 'Merrill Lynch' in November 2017, India is likely to overtake Japan in nominal GDP to become world's third-largest economy by which year? (+2, -0.5)

- a. 2050
 - b. 2028
 - c. 2025
 - d. 2020
-

94. On the basis of whose recommendations the Union Ministry of Minority Affairs has ended the 'Haj subsidy' from 2018? (+2, -0.5)

- a. Umesh Sinha Committee

- b. Shahnaz Hussain Committee
 - c. Afzal Amanullah Committee
 - d. Mukhtar Abbas Naqvi Committee
-

95. Calculate the frequency (in Hz) of a sound wave of wavelength 5 m travelling with a speed of 360 m/s. (+2, -0.5)

- a. 1800
 - b. 36
 - c. 900
 - d. 72
-

96. In a sound wave compressions are regions where density _____. (+2, -0.5)

- a. as well as pressure is high.
 - b. is low and pressure is high
 - c. is high and pressure is low
 - d. as well as pressure is low.
-

97. Soil contains decayed remains of living organisms. This is called _____. (+2, -0.5)

- a. Saline Soil
- b. Biosphere
- c. Humus

d. Minerals

98. Which of the statements given below are correct? (+2, -0.5)

- A) Sebastian Vettel won the Formula One 2017 Mexican Grand Prix.
- B) In 2017, Per Mertesacker captained the Premier League team Arsenal.
- C) Tan Zhongyi won the 2017 Women's World Chess Championship.

- a. Only C
 - b. Only B
 - c. Both B and C
 - d. Both A and C
-

99. _____ among the following is a Language of JavaScript. (+2, -0.5)

- a. JavaScript VBscript
 - b. text/JavaScript
 - c. text/VBscript
 - d. text/ECMAScript
-

100. Where was the 7th edition of Rashtriya Sanskriti Mahotsav held from 14 January to 20 January, 2018? (+2, -0.5)

- a. Kanpur
- b. New Delhi

- c. Jaipur
- d. Bengaluru

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Answers

1. Answer: c

Explanation:

The correctly spelt word is *impersonators*. It means a person who pretends to be someone else for fraud or entertainment.

Example : *He is a famous Jackie Chan impersonator.*

Thus, the correct answer is **option 3**.

2. Answer: a

Explanation:

We need to contrast something with something else. So, we can have A as the first part of the sequence. 'Contrast this with the attitude of the general...' seems logically correct. Now, the next question arises : attitude of whom? Part B gives the answer and hence it can follow A. C can form the ending part of the sentence.

Contrast this with the attitude of the general public in the advanced countries towards senior citizens

Thus, the correct sequence is ABC, making **option 1** the correct answer.

3. Answer: b

Explanation:

The subject here is *we* which is plural. So, *is/was* is incorrect which points towards the need to improve the sentence. Also, we can eliminate option 1 based on the same

reason.

The correct form of verb to be used is its past participle. 'We were amused...' is correct and not 'We were amusing...' because the sentence tells us they were entertained / delighted by the number of channels (and not they were entertaining by the number of channels)

Thus, the correct answer is **option 2**.

*We, on the other hand, **were amused** by the number of channels it had to offer.*

4. Answer: d

Explanation:

The sentence uses the phrase *at that time* which means that the first part of the sentence deals with something in the past. 'The news had appeared ...' seems correct. *Have / is* cannot be used since the tense is not present.

Thus, no improvement is required, making **option 4** the correct answer.

5. Answer: b

Explanation:

Let us look into the meaning of the given words:

Narcoleptic – marked by a neurological disorder that affects the control of sleep-wake cycles

Invigorate – to make someone feel more energetic, fresher and healthier

Prostrate – lying flat with the face down and arms stretched out, especially as a sign of respect

Exasperate – to make someone annoyed or frustrated

Therefore, the correct answer is **option 2**.

6. Answer: b

Explanation:

Let us look into the meaning of the given words:

Woe – great sorrow or sadness

Nirvana – a state of freedom in which one is free from suffering and desires.

Depression – a mood disorder marked by low mood and feeling of sadness

Despondency – unhappy with no hope (similar to depression)

Thus, the correct answer is **option 2**. (Here, *transcendent* means higher / superior)

7. Answer: a

Explanation:

'As high as a kite' means to be greatly excited or affected by alcohol / drugs.

Example : after the party, I was as high as a kite.

Therefore, the correct answer is **option 1**. (intoxicated means to lose control especially because of consumption of alcohol)

8. Answer: c

Explanation:

The meaning of the phrase *pull the plug* means to prevent an activity from continuing; to put a stop to something.

Example : The agency pulled the plug on this deal.

Thus, the correct answer is **option 3**.

9. Answer: b

Explanation:

'A' / 'An' are articles used for singular nouns. We use 'a' in front of consonant sounds and 'an' before vowel sounds.

In English alphabets, A, E, I, O and U are vowels and the rest are consonants.

Examples : She is eating an apple.

A boy came to meet me.

In the given sentence, *advertisement* starts with a vowel sound. So, *an* will be the most appropriate choice. (We cannot use *the* here as we are not referring to a specific advertisement but a general one)

Thus, the correct answer is **option 2**.

10. Answer: d

Explanation:

Here, the correct word is *no*. 'No salesman can sell anything unless...' is grammatically correct.

Neither is generally used to make negative statements when we refer to two things. None is used when referring to more than two things.

Neither of his two brothers came to meet the professor.

None of his friends were able to help him.

As the blank is not followed by the preposition *of*, we cannot use *none*. *No* is the most appropriate choice (*No* is followed by a noun – here salesman is the noun)

Thus, the correct answer is **option 4**.

11. Answer: d

Explanation:

Than is used to make comparisons.

She is more understanding than I am.

He has more friends than I have.

Then is used when we are talking about time (to mean at that time)

I was busy then.

It can also be used to indicate the next action in order.

We will deal with your problem and then we will head out for dinner.

In the given question, the sentence is making a comparison. So, we need to use *than* and not *then*.

*...is infinitely more **than** that, it is the basis...*

Thus, the correct answer is **option 4**.

12. Answer: d

Explanation:

We are looking for an adverb – a word that describes an action (verb). Here, we are looking for a word that suitably describes the action 'writing and speaking one's own language'. *Effectively* is an adverb whereas *Effective* is an adjective. We will understand the fundamental difference between these two words from the following examples:

The problem has some effective solutions (here, effective describes the noun *solutions*)

The problem should be solved effectively (here, effectively describes the verb *solved*)

Thus, *effectively* will fit into the blank appropriately, making **option 4** the correct answer.

*...One's own language **effectively**. It is the basis...*

13. Answer: d

Explanation:

The word we are looking for is an adjective (which describes the noun *interest*). Universe is a noun itself so it will not fit into the blank. *Universally* is an adverb which describes a verb (and not a noun). *Example : Development is not universally welcome.*

The most appropriate word is *universal* which means existing everywhere or involving everyone.

*...subject of really **universal (common)** interest and utility...*

Thus, **option 4** is the correct answer.

14. Answer: d

Explanation:

The correctly spelt word is *interference*. It means a situation in which a person unnecessarily gets involved.

Example : *I do not like my neighbour's interference in my private life.*

Thus, the correct answer is **option 4**.

15. Answer: c

Explanation:

The correct answer is option 3.

In Direct speech, the actual words of the speaker are quoted within quotation marks.

In Indirect speech, we report someone else's words in our own words.

When we change the speech from Direct to Indirect, we do not use the quotation marks. Also, we use 'that' before the Indirect statement. We make suitable changes in tenses as well.

The most important point to be noted here is that if the reporting verb is in the present tense, the tenses of the verbs in the reported speech remain unchanged.

Since the reporting verb is 'says', the first person singular verb 'am' in the direct speech becomes 'is' in the third person singular.

16. Answer: c

Explanation:

Active Voice – the subject does the action on an object

Passive Voice – Something is done on the subject

In the given sentence, the part *people are considering* indicates that the subject is **the people** who are the doer of the action. So, the sentence is in its active voice.

In order to change it into passive voice, the object in the active voice becomes the subject in the passive voice – the object is used in the beginning of the sentence. A suitable tense of the verb is followed. The following example will help us to get more clarity.

Active voice : The chef is cooking a delicious meal. ('A delicious meal' is the object here)

Passive voice : A delicious meal is being cooked by the chef. ('A delicious meal' is used in the beginning of the sentence)

While doing the conversion, the meaning conveyed should not be changed.

Keeping these points in mind, the given sentence when converted in its passive voice is :

He was considered an outcast by the people.

Thus, the correct answer is **option 3**.

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17. Answer: b

Explanation:

The phrase *Daily pricing* is singular. So, *is* can follow which means the first part of the sequence is part P. Now, the next question arises : Daily pricing is seen as a ploy to do what? This is answered by part R. So, we can have R to follow P with Q as the suitable ending part.

Thus, the correct sequence is PRQ making **option 2** the correct answer.

Daily pricing is being seen as a ploy to increase prices while allowing the government to escape any political backlash.

18. Answer: b

Explanation:

If we are *allergic* to something, our body produces an abnormal reaction like rash. We can say that we are affected by it or sensitive to it. So, the options 1 and 3 are eliminated.

If we are immune to something, we are not affected by it. We are resistant to it.

Therefore, the correct answer is **option 2** as the word *immune* expresses the opposite meaning.

19. Answer: d

Explanation:

Clamorous means making a loud and confused noise. As we are looking for the word expressing opposite meaning, we can eliminate options 1 and 2. Clamorous can also mean demanding something loudly. Suppression seems to be opposite to this meaning as it means to prevent something forcefully from continuing.

Therefore, the correct answer is **option 4**.

Note– Even if we did not know the other meaning of *clamorous* related to demanding in loud manner, we could have used the method of elimination here because all other options are similar in meaning.

20. Answer: d

Explanation:

The correct answer is option 4 i.e. **Humdrum**.

★ Key Points

- Let's look at the meaning of the given word and the marked option-
 - **Mundane**– *lacking interest or excitement; dull.*
 - **Humdrum** –*lacking excitement or variety; boringly monotonous.*
- So both word **Mundane** and **humdrum** have **similar meaning**.
- Thus, **option 4** is the **most appropriate** answer here.

WORDS	MEANING
Bounteous	<i>large or generous in the amount</i>
Heavenly	<i>of or from heaven, or giving great pleasure</i>
Exciting	<i>causing great enthusiasm and eagerness.</i>

21. Answer: b

Explanation:

The word pithy means to express an idea clearly in a few words.

Let us look into the meaning of the given words:

Verbose – containing more words than necessary

Brief – containing few words

Lengthy – of considerable length, very long

Unabridged – something containing the original content without cutting it short.

Thus, the word *brief* is closer in meaning, making **option 2** the correct answer.

22. Answer: a

Explanation:

Using a pronoun like **their** or **his** is not suitable here because the word in the blank will use an *apostrophe* mark (–'s).

's is used to show possession. Only nouns will use the 's form. Example – *Rahul's car* refers to the car belonging to Rahul. *Their* and *his* highlight the possessive feature already, so we don't use 's in these words. (*Her/ Their/ His car* is correct and **not** *Her's/ Their's/ His's car*).

Only option 1 will suit the grammatical structure of the sentence.

Complete sentence – *A thorough search at **thief's** home produced stolen items.*

Therefore, the correct answer is **option 1**.

23. Answer: d

Explanation:

The correct preposition to be used here is *on* . When we refer to a large or general place, we use *in*. When we refer to a specific smaller place / street (especially a surface), we use *on* .

I met her in the city.

I met her on the Paul street in New York.

Now, a person sits **on the surface of the sofa** (and not inside it or under it).

Complete sentence – *Priya sat **on** a sofa at the Opera.*

So, the correct answer is **option 4** .

24. Answer: b

Explanation:

The error lies in the part 2 of the sentence. Therefore, the correct answer is **option 2**.

In order to decide whether *was* or *were* will be used, we should find out the subject first. (the noun)

In the given sentence, the subject is *demonstration of the live transmission of images* (and not *images*). The *demonstration of any xyz* is singular (even if *xyz* is plural). So, we should use *was* and not *were*.

Correct Sentence - *The first demonstration of the live transmission of images **was** given by Georges Rignoux and A. Fourier in Paris in 1909.*

25. Answer: a

Explanation:

The error lies in the part 1 of the sentence. Therefore, the correct answer is **option 1**.

Instead of *cause*, we should use *caused*. Whenever a verb follows *is*, it should be used in its past participle form.

Examples: *She is worried, He is concerned, Rakhi is loved by everyone.*

Correct Sentence - *A rainbow is **caused** by reflection, refraction, and dispersion of light among water droplets resulting in a spectrum of light appearing in the sky.*

26. Answer: a

Explanation:

As 'Paper' is made from 'Pulp'. Similarly, 'Sack' is made from 'Jute'.

27. Answer: b

Explanation:

The logic followed here is:

$$48 : 41 \rightarrow 48 - 7 = 41$$

Similarly,

$$74 - 7 = 67$$

Hence, answer is '74 : 67'.

28. Answer: b

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

The logic followed here is:

$$\begin{array}{r} \text{D L Q} \\ | \quad | \quad | \\ -6 \quad -6 \quad -6 \\ | \quad | \quad | \\ \text{X F K} \end{array}$$

Similarly,



Hence, the correct answer is '**LAG**'.

29. Answer: a

Explanation:

All options except 'Valley' contain stagnant water.

30. Answer: a

Explanation:

The logic followed here is:

All options '24 - 6', '32 - 8', and '88 - 22' follows the pattern 'number $\times$ 4 - number' while '16 - 5' does not follows the same pattern.

Hence, '16 - 5' is the odd one out.

31. Answer: b

Explanation:

The logic followed here is:

1) ORU $\rightarrow$ O + 3 = R; R + 3 = U

2) CFI $\rightarrow$ C + 3 = F; F + 3 = I

3) $HKN \rightarrow H + 3 = K; K + 3 = N$

4) $FJM \rightarrow F + 4 = J; J + 3 = M$

Hence, 'FJM' is the odd one out.

32. Answer: a

Explanation:

3. Fountain

5. Frail

4. Frank

1. Frantic

2. Fraud

Hence, answer is '35412'.

33. Answer: d

Explanation:

$43 + 15 = 58;$

$58 + 30 = 88;$

$88 + 45 = 133;$

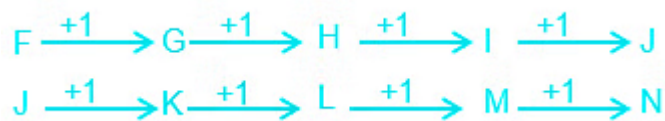
$133 + 60 = \mathbf{193} ;$

$193 + 75 = 268$

Hence, answer is '193'.

34. Answer: b

Explanation:



Hence, 'IM' is the answer.

35. Answer: d

Explanation:

Let, Age of Ashish be x.

Given:

Age of Ashish = $3 \times$ Age of Varun $\rightarrow$ Ashish $>$ Varun _____ (1)

Age of Arvind = $\frac{1}{2} \times$ Age of Varun $\rightarrow$ Arvind $<$ Varun _____ (2)

Amit is 8 years older than Varun but 8 years younger to Ashish:

Ashish $>$ Amit $>$ Varun _____ (3)

On combining (1), (2) and (3), we get:

Ashish $>$ Amit $>$ Varun $>$ Arvind

Hence, 'Amit' is the second eldest.

36. Answer: a

Explanation:

1) Train → TRA VELL IN G

2) Rain → T RA VELL IN G

3) Van → TR AV ELLI NG

4) Track → TRA VELLING (can't be formed using the word 'Travelling' as there is no 'C and K' in it).

Track cannot be formed using the letters of the given word.

37. Answer: c

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

Alphabets are coded as per their positional values in the alphabetical series.

Letter	T	U	B	E
Code	20	21	2	5

Letter	P	I	N	C	H
Code	16	9	14	3	8

Letter	M	A	R	C
Code	13	1	18	3

Hence, the code for MARC is '131183'.

38. Answer: b

Explanation:

Symbol	-	+	×	÷
Meaning	+	×	÷	-

Given equation: $8 \div 6 - 5 + 70 \times 10 = ?$

On replacing the symbol:

$$8 - 6 + 5 \times 70 \div 10 = ?$$

$$\rightarrow 8 - 6 + 5 \times 7$$

$$\rightarrow 8 - 6 + 35$$

$$\rightarrow 43 - 6$$

→ 37

Hence, answer is '37'.

39. Answer: c

Explanation:

Given equation: $16 \div 6 + 35 \times 9 - 15 = 31$

After interchanging ' $\div$ ' and ' $-$ ' we get:

$$16 - 6 + 35 \times 9 \div 15 = 31$$

L.H.S of equation: $16 - 6 + 35 \times 9 \div 15$

$$\Rightarrow 16 - 6 + 21$$

$$\Rightarrow 37 - 6$$

$$\Rightarrow 31 = \text{R.H.S}$$

Hence, the correct answer is ' $\div$ and $-$ '.

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40. Answer: a

Explanation:

The logic/rule followed here is:

$$70 \$ 7 = -10 \rightarrow -(70 \div 7) = -10$$

$$50 \$ 5 = -10 \rightarrow -(50 \div 5) = -10$$

$$40 \$ 8 = -5 \rightarrow -(40 \div 8) = -5$$

Similarly,

$$10 \div 2 \rightarrow -(10 \div 2) = -5$$

Hence, the correct answer is '-5'.

41. Answer: d

Explanation:

The logic followed here is,

Z is shifting two places to its left in each set of letters, which is shown in the table below,

Y	X	Y	X	Y	<u>Z</u>	X	Y
Y	X	Y	<u>Z</u>	X	Y	X	Y
Y	<u>Z</u>	X	Y	X	Y	X	Y
Y	X	Y	X	Y	X	<u>Z</u>	Y
Y	X	Y	X	<u>Z</u>	Y	X	Y
Y	X	<u>Z</u>	Y	X	Y	X	Y

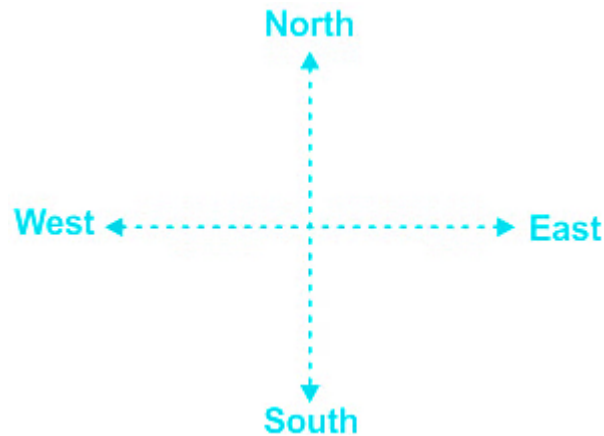
Hence, the correct answer is 'YXZYXYXY'.

42. Answer: a

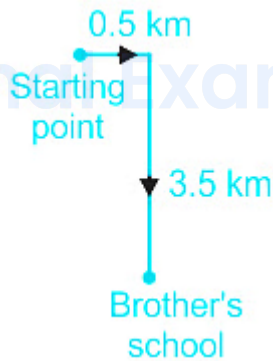
Explanation:

Given :-

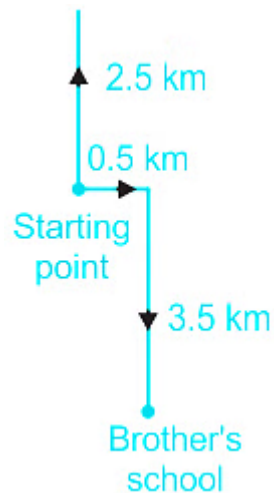
- 1) A brother and sister leave home for school. The brother goes 0.5 km East.



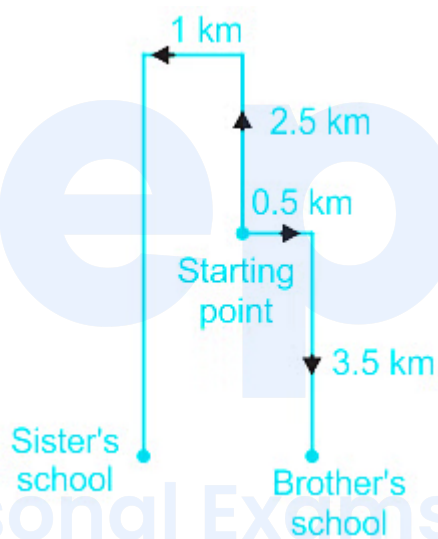
- 2) Then turns right and goes 3.5 km and reaches his school.



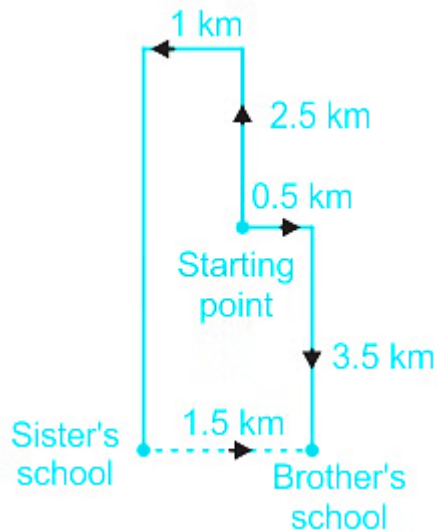
- 3) The sister goes 2.5 km North.



4) Then 1 km West.



5) Then turns left and goes 6 km and reaches her school.



As can be seen clearly from above that the Brother's school is 1.5 km to the East of Sister's school.

Hence, the correct answer is **"1.5 km East"**.

43. Answer: d

Explanation:



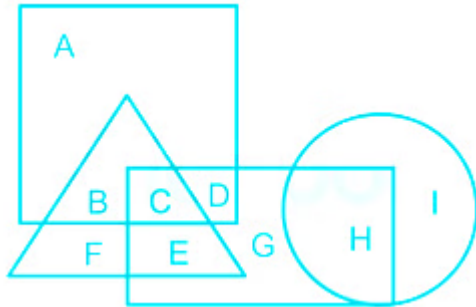
Conclusion I: Some juices are drinks → False (it is possible but not definite)

Conclusion II: No beverages are juices → False (As some beverages are juices)

Hence, 'neither conclusion I nor conclusion II follows'.

44. Answer: d

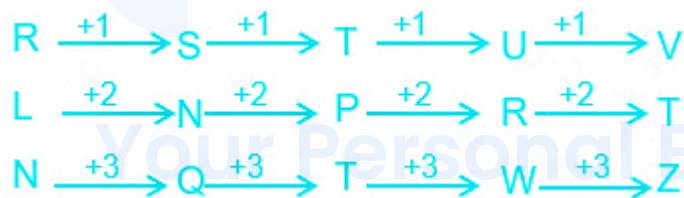
Explanation:



Hence, 'HCE' is the answer.

45. Answer: d

Explanation:

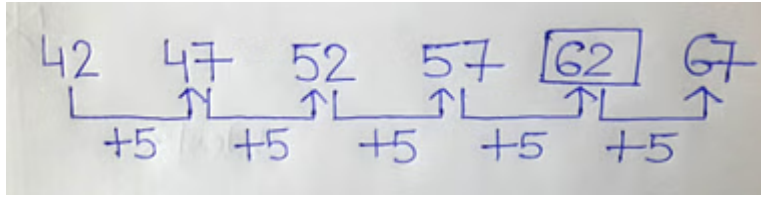


Hence, 'VTZ' is the answer.

46. Answer: a

Explanation:

The logic followed here is:



Hence, the correct answer is "62".

47. Answer: c

Explanation:

$$1) (17, 84, 35) \rightarrow [17, \{(17 \times 5) - 1\}, \{(17 \times 2) + 1\}]$$

$$2) (12, 59, 23) \rightarrow [12, \{(12 \times 5) - 1\}, \{(12 \times 2) - 1\}]$$

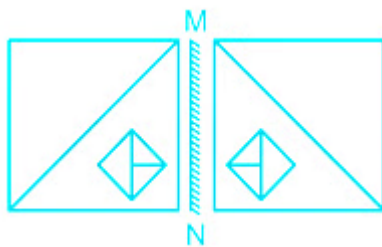
$$3) (7, 34, 13) \rightarrow [7, \{(7 \times 5) - 1\}, \{(7 \times 2) - 1\}]$$

$$4) (11, 54, 21) \rightarrow [11, \{(11 \times 5) - 1\}, \{(11 \times 2) - 1\}]$$

Hence, (17, 84, 35) is the odd one out.

48. Answer: a

Explanation:

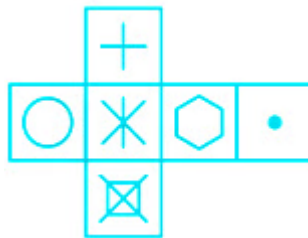


Hence, answer is option '1'.

49. Answer: a

Explanation:

From the figure we can conclude:



- 1) The face of the dice with dot will be opposite to the side with *.
- 2) The face of the dice with + will be opposite to the side with a cross and square.
- 3) The face of the dice with hexagon will be opposite to the side with circle.



In the above figure, the top surface of the cube having a dot is adjacent to the side having * sign, which is not possible. Hence, the above figure cannot be formed.

Hence, answer is option '1'.

50. Answer: b

Explanation:

- 1) 65, 22, 77, 43 → S, E, N, D
- 2) 43, 75, 12, 69 → D, P, G, O
- 3) 21, 65, 12, 89 → L, S, G, Y

4) 13, 96, 30, 78 $\rightarrow$ I, S, I, W

Hence, answer is '65, 22, 77, 43'.

51. Answer: c

Explanation:

Calculation:

Prime factor of 1024

$$\Rightarrow 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$$

$$\Rightarrow 2^{10}$$

$\therefore$ the number of prime factor of 1024 is 10.

52. Answer: a

Explanation:

We know, which number divisible by 1 and itself is called prime number.

$\therefore$ 341 divided by 11 so 341 is not a prime number.

53. Answer: d

Explanation:

We know, $(x + y)^2 = x^2 + y^2 + 2xy$

Given, $x^3 + y^3 = 8$ & $x + y = 2$

So, $x^3 + y^3 = (x + y)(x^2 + y^2 - xy)$

$$\Rightarrow 8 = 2 \times \{(x + y)^2 - 2xy - xy\}$$

$$\Rightarrow 4 = \{2^2 - 3xy\}$$

$$\Rightarrow 3xy = 0$$

$$\Rightarrow xy = 0$$

$$\text{Now, } (x + y)^2 = x^2 + y^2 + 2xy$$

$$\Rightarrow 2^2 = x^2 + y^2 + 2 \times 0$$

$$\Rightarrow 4 = x^2 + y^2$$

$$\Rightarrow x^2 + y^2 = 4$$

Squaring both sides, we get

$$\Rightarrow (x^2 + y^2)^2 = x^4 + y^4 + 2x^2y^2$$

$$\Rightarrow 4^2 = x^4 + y^4 + 2 \times 0$$

$$\therefore x^4 + y^4 = 16$$

54. Answer: d Your Personal Exams Guide

Explanation:

$$\text{We know } (x - y)^2 = x^2 + y^2 - 2xy$$

$$\text{And, } (x + y)^2 = x^2 + y^2 + 2xy$$

$$\text{Given, } y^4 + \frac{1}{y^4} = 34$$

$$\left(y^2 + \frac{1}{y^2}\right)^2 = y^4 + \frac{1}{y^4} + 2 \times y^2 \times \frac{1}{y^2}$$

$$\Rightarrow \left(y^2 + \frac{1}{y^2}\right)^2 = 34 + 2 = 36$$

$$\Rightarrow y^2 + \frac{1}{y^2} = 6$$

$$\text{Now, } \left(y - \frac{1}{y}\right)^2 = y^2 + \frac{1}{y^2} - 2 \times y \times \frac{1}{y}$$

$$\therefore \left(y - \frac{1}{y}\right)^2 = 6 - 2 = 4$$

55. Answer: a

Explanation:

We know, two triangle are similar, if their corresponding angles are equal and their corresponding sides are in the same ratio or proportion.

If $\angle A = \angle D$, then

$$\Rightarrow AB/AC = DE/DF$$

$$\Rightarrow 14/10 = 7/5$$

$$\Rightarrow 7/5 = 7/5$$

So, option 1 is right

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56. Answer: c

Explanation:

We know, angle (radian) = arc/radius

$$\Rightarrow 54 \times \pi/180 = \text{arc}/14$$

$$\Rightarrow 54 \times 22/7 \times 1/180 = \text{arc}/14$$

$$\therefore \text{arc} = 13.2 \text{ cm}$$

57. Answer: c

Explanation:

According to the question

$$\Rightarrow 5\% \text{ of } (P + Q) = 20\% \text{ of } (P - Q)$$

$$\Rightarrow \frac{5}{100} \times (P + Q) = \frac{20}{100} \times (P - Q)$$

$$\Rightarrow (P + Q) = 4 \times (P - Q)$$

$$\Rightarrow P + Q = 4P - 4Q$$

$$\Rightarrow 3P = 5Q$$

$$\Rightarrow P/Q = 5/3$$

$$\text{Let } P = 5 \text{ \& } Q = 3$$

$$\therefore \text{Required \%} = \frac{5}{3} \times 100 = 166.66\%$$

58. Answer: a

Explanation:

Let number x be added to each so that the resulting numbers will be in proportion.

$$\frac{4+x}{16+x} = \frac{18+x}{58+x}$$

Using dividendo and componendo

$$\Rightarrow \frac{4+x+16+x}{4+x-16-x} = \frac{18+x+58+x}{18+x-58-x}$$

$$\Rightarrow \frac{20+2x}{-12} = \frac{76+2x}{-40}$$

$$\therefore x = 2$$

59. Answer: a

Explanation:

In 250 litres mixture of soda and water the quantity of soda = $250 \times \frac{7}{25} = 70$

Similarly, the quantity of water = $250 \times \frac{18}{25} = 180$

Let x litres of soda be added in order to make ratio 2 : 3

According to the question

$$\Rightarrow \frac{70+x}{180} = \frac{2}{3}$$

$$\Rightarrow 210 + 3x = 360$$

$$\Rightarrow 3x = 150$$

$$\Rightarrow x = 50 \text{ litres}$$

$\therefore$ 50 litres more litres of soda should be added.

60. Answer: a

Explanation:

Let the third number be $3x$

So, the first number is $4x$

And the second number = $3x + 20$

We know, average = sum of all the observation / total number of observation

According to the question

$$\text{Average} = \frac{(4x + 3x + 20 + 3x)}{3}$$

$$\Rightarrow (4x + 3x + 20 + 3x) = 40 \times 3 = 120$$

$$\Rightarrow 10x = 100$$

$$\Rightarrow x = 10$$

$$\therefore \text{Second number} = 3x + 20 = 3 \times 10 + 20 = 30 + 20 = 50$$

61. Answer: b

Explanation:

A sum of Rs. 4000 becomes Rs 6000 in 1 year

So, Principal = 4,000 and SI = 6,000 – 4,000 = 2,000

We know, $SI = (P \times r \times t) / 100$

$$\Rightarrow 2,000 = (4,000 \times r \times 1) / 100$$

$$\Rightarrow r = 50\%$$

According to the question

$$A = P\left(1 + \frac{r}{100}\right)^4$$

$$\Rightarrow A = 4,000 \times 3/2 \times 3/2 \times 3/2 \times 3/2$$

$$\Rightarrow A = 20250$$

$\therefore$ After 4 years, the sum will be Rs. 20250.

62. Answer: a

Explanation:

First shirt is sold at a profit of 30%

We write $30\% = 3/10$

Let CP of the first shirt be 10 and profit be 3

So, SP of the first shirt = $10 + 3 = 13$

$$(CP)_1 / (SP)_1 = 10/13 \quad \text{-----(1)}$$

Similarly second shirt is sold at a loss of 30%

We write $30\% = 3/10$

Let CP of the second shirt be 10 and loss be 3

So, SP of the second shirt be = $10 - 3 = 7$

$$(CP)_2 / (SP)_2 = 10/7 \quad \text{-----(2)}$$

Given, CP of the first shirt is equal to the SP of the second shirt.

Multiply by 7 in equation (1) and multiply by 10 in equation (2) we get

$$(CP)_1 / (SP)_1 = 70/91$$

$$(CP)_2 / (SP)_2 = 100/70$$

$\therefore$ ratio of the selling price of the first shirt to the cost price of the second shirt is $91 : 100$

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63. Answer: a

Explanation:

Let the CP of the article be 100

So, MP of the article = $100 \times 160/100 = 160$

If no profit or no loss, then discount % = $(MP - CP) / MP \times 100$

$\therefore$ Required discount % = $(160 - 100) / 160 \times 100 = 37.5\%$

64. Answer: c

Explanation:

Let the number be x

According to the question

$$\Rightarrow a^2 - 169 = 7056$$

$$\Rightarrow a^2 = 7056 + 169$$

$$\Rightarrow a^2 = 7225$$

$$\Rightarrow a = 85$$

$\therefore$ Number is 85

65. Answer: d

Explanation:

We know, $h_1 \times d_1 = h_2 \times d_2$

So, $h_1 = 5$ hr, $d_1 = 24$ hr, $d_2 = 8$ & $h_2 = ?$

$$\Rightarrow 5 \times 24 = h_2 \times 8$$

$$\Rightarrow h_2 = 15 \text{ hours}$$

$\therefore$ 15 hours a day he should work.

66. Answer: c

Explanation:

If opposite directions then,

$$\text{Total Speed} = S_1 + S_2$$

$$\text{Given } S_1 = S_2$$

$$\text{Total distance} = 120 + 120 = 240$$

$$\text{Total time} = 12 \text{ sec}$$

We know, speed = distance/time

$$\text{So, total speed} = 240/12 = 20 \text{ m/sec}$$

$$S_1 + S_2 = 20 \text{ m/sec}$$

$$\Rightarrow 2S_1 = 20 \text{ m/sec}$$

$$\Rightarrow S_1 = 10 \times 18/5 = 36 \text{ km/hr}$$

$\therefore$ The speed of each train is 36 km/hr

67. Answer: c

Explanation:

Number of students applied in 2011 = 6,000

Number of students applied in 2012 = 2,500

Number of students applied in 2013 = 9,500

Number of students applied in 2014 = 7,000

Number of students applied in 2015 = 5,000

$\therefore$ We can say in 2013 applications were greater than that of the previous year.

68. Answer: a

Explanation:

Number of students applied in 2017 = 5,500

And number of students applied in 2012 = 2,500

$\therefore$ Difference in applications between the years 2017 and 2012 = $5500 - 2500 = 3000$

69. Answer: c

Explanation:

Number of students applied in 2014 = 7,000

Number of students applied in 2015 = 5,000

$\therefore$ Required % = $(7,000 - 5,000)/5,000 \times 100 = 2,000/5,000 \times 100 = 40\%$

70. Answer: d

Explanation:

Number of students applied in 2015 = 5,000

Number of students applied in 2016 = 1,500

Number of students applied in 2017 = 5,500

Total applications in 2015, 2016 and 2017 = $5,000 + 1500 + 5500 = 12,000$

If each applicant has to submit Rs. 500 as application fees

$\therefore$ Total fees collect by the college in the last three years = $12,000 \times 500 = 60,00,000$

71. Answer: b

Explanation:

We know, area of the square = a^2

And perimeter of the square = $4a$

Area of the given square = 72.25

$$\Rightarrow a^2 = 72.25$$

$$\Rightarrow a = 8.5$$

$$\therefore \text{Perimeter of the given square} = 4a = 4 \times 8.5 = 34 \text{ cm}$$

72. Answer: d

Explanation:

We know, the circumference of the circle = $2\pi r$

Given, radius of the circle = 17.5

$$\therefore \text{The circumference of the given circle} = 2\pi r = 2 \times \frac{22}{7} \times 17.5 = 110$$

73. Answer: a

Explanation:

Given: The curved surface area of cylinder = 352 cm^2

The diameter of the cylinder = 14 cm

Calculation:

⇒ The radius of the cylinder = $14/2 = 7$ cm

Formula: The curved surface area of the cylinder = $2\pi rh$

$$\Rightarrow 2\pi rh = 352$$

$$\Rightarrow 2 \times 22/7 \times 7 \times h = 352$$

$$\Rightarrow h = 8 \text{ cm}$$

∴ Height of the cylinder is 8 cm

74. Answer: a

Explanation:

We know, the sum of all the three angles of a triangle is 180

Given, $\angle Z = 60$ & $\angle Y = 90$

$$\Rightarrow \angle X + \angle Y + \angle Z = 180$$

$$\Rightarrow \angle X + 90 + 60 = 180$$

$$\Rightarrow \angle X = 30$$

$$\therefore \cot X - 1/3 = \cot 30 - 1/3 = \sqrt{3} - 1/3 = (3\sqrt{3} - 1)/\sqrt{3}$$

Thus, the correct answer is option 1.

75. Answer: b

Explanation:

Given, $\sin P = 12/13$ & $\angle Q = 90$

$$\sin P = \text{Perpendicular/hypotenuse} = RQ/PR = 12/13$$

$$RQ = 12k \text{ \& } PR = 13k$$

In right angled ΔPQR

By Pythagoras theorem

$$(PR)^2 = (PQ)^2 + (RQ)^2$$

$$\Rightarrow 13k^2 = (PQ)^2 + 12k^2$$

$$\Rightarrow (PQ)^2 = 25k^2$$

$$\Rightarrow PQ = 5k$$

$$\therefore \tan R = PQ/RQ = 5/12$$

76. Answer: b

Explanation:

- Marginal propensity to consume refers to the ratio of change in consumption expenditure to change in total income.
- $MPC = \text{Change in consumption } (\Delta C) / \text{Change in Income } (\Delta Y)$
- The marginal propensity to consume lies between 0 to 1 as we know incremental income is either spent on consumption or saved for future use.
- If the entire income is consumed, i.e. $\Delta S = 0$, then $MPC = 1$ and if entire additional income is saved, i.e. $\Delta C = 0$, then $MPC = 0$. So, 2 is the correct answer.

77. Answer: b

Explanation:

- The Forward Markets Commission is the chief regulator of commodity future markets in India. (FMC) is a statutory body set up under the Forward Contracts

(Regulation) Act, 1952. It functions under the administrative control of the Department of Economic Affairs, Ministry of Finance since September 2013.

- Forwards Market Commission is an entity monitoring and regulating the operations and activities of commodities future markets in India.
- FMC sources, collects and publishes information concerning trading conditions for different commodities. Hence, 2 is the correct answer.

78. Answer: b

Explanation:

The Correct answer is Chalukya – Tanjore.

★ Key Points

- **Chalukya – Tanjore** does not correctly match the given pattern. **Hence, 3 is the correct answer.**

Dynasties	Capital	Time period	Language
Gurjara – Pratihara	Kannauj	Mid-8 th century CE	Sanskrit, Prakrit,
Pallava – Kanchi	Kanchipuram	275 CE – 897 CE	Sanskrit, Prakrit, Tamil, Telugu
Chalukya	Badami	543 CE – 753 CE	Kannada, Sanskrit
Sen – Lakhnauti	Lakhnauti	1070 CE – 1230 CE	Sanskrit

79. Answer: c

Explanation:

- 'Todarmal system' is also known as Zabti or Dahsala system.
- Raja Todar Mal, as finance minister of Akbar, brought new system of revenue collection known as 'Zabti system' and 'Dahshala system' which was a system of taxation.
- It was introduced under the reign of Akbar in the year 1580-82 in order to put a check on the problems that were arising due to fixing prices each year and revenue settlement of the last year.
- Provinces were sub divided into 'Dastur' or revenue circles with own revenue rates.
- This system of land revenue became very popular and continued for a very long time. Hence, 1 is the correct answer.

80. Answer: a

Explanation:

- When built, Suez Canal was 164 km (102 mi) long and 8 m (26 ft) deep. After several enlargements, it is 193.30 km (120.11 mi) long, 24 m (79 ft) deep and 205 metres (673 ft) wide.
- The starting point of the canal is 'Port Said' and the ending point is 'Port Suez'.

Suez canal	Panama canal
• 193 km	• 75 km
• World's first and largest sea canal during 18th century.	• World's second-largest sea canal – connecting American continent to the other side of the World.
• Locks = 0 and Depth = 24m	• Locks = 6 and Depth = 18m
• Connects Mediterranean Sea with the Red Sea.	• Connects the Atlantic and Pacific oceans.

Hence, 4 is the correct answer.

81. Answer: c

Explanation:

- The 'Ukai Dam', constructed across the Tapti River, is the second largest reservoir in Gujarat after the SardarSarovar.
 - It is also known as 'Vallabh Sagar' and was constructed in 1972.
 - Having a catchment area of about 62,255 km² and a water spread of about 52,000 hectares, its capacity is almost same as that of the BhakraNangal Dam.
- Hence, 2 is the correct answer.

82. Answer: c

Explanation:

- The exponent of Lokayata Darshana was 'Charvak'.
- 'Charvaka' originally known as Lokāyata and Bṛhaspatya, is the ancient school of Indian materialism.
- Charvaka holds direct perception, empiricism, and conditional inference as proper sources of knowledge, embraces philosophical scepticism and rejects Vedas, Vedic ritualism, and supernaturalism.
- Its teachings have been compiled from historic secondary literature such as those found in the shastras, sutras, Indian epic poetryas well as in the dialogues of Gautama Buddha and from Jain literature.

Hence, 3 is the correct answer.

83. Answer: a

Explanation:

- The theme for the GCCS 2017 is 'Cyber4All: An Inclusive, Sustainable, Developmental, Safe and Secure Cyberspace'
- GCCS is a prestigious international conference that aims at encouraging dialogue among stakeholders of cyberspace, which has been taking place since 2011. Incepted in 2011 in London, GCCS witnessed a participation of 700 global delegates.
- The second conference was held in 2012 in Budapest, the third edition of GCCS was held in 2013 in Seoul, the fourth version GCCS 2015 was held in The Hague, Netherlands and so on.
- The GCCS 2017 took place on the 23rd and 24th of November, 2017 in Aero City, New Delhi.

Hence, 1 is the correct answer.

84. Answer: a

Explanation:

Name	Titles	Year
Manushi Chhillar	Miss India, Miss World	2017
Yukta Mookhey	Miss India, Miss World	1999
Diana Hayden	Miss India, Miss World	1997
Sushmita Sen	Miss India Universe, Miss Universe	1994

- Sushmita Sen is not crowned with the title of Miss World. Hence, 3 is the correct answer.

85. Answer: b

Explanation:

- The chief crop of Sri Lanka in which country is self-sufficient is 'Rice'.
- Rice is cultivated during 'Maha' and 'Yala' seasons. Maha Season starts by September and ends by March during North-east monsoon, and Yala season starts by May and ends by August.
- Tea is also cultivated in the central highlands and is a major source of foreign exchange. Vegetables, fruits and oilseed crops are also cultivated in the country.

Hence, 1 is the correct answer.

86. Answer: a

Explanation:

The correct answer is Controller.

Explanation:

- A nuclear reactor produces and controls the release of energy from splitting the atoms of certain elements. In a nuclear power reactor, the energy released is used as heat to make steam to generate electricity. **Hence, the controller is the correct answer.**
- FUEL: Uranium is the basic fuel. Usually, pellets of uranium oxide (UO_2) are arranged in tubes to form fuel rods. The rods are arranged into fuel assemblies in the reactor core.
- Moderator: Material in the core slows down the neutrons released from fission so that they cause more fission. It is usually water but may be heavy water or graphite.
- Controller: These are made with neutron-absorbing material such as cadmium, hafnium or boron, and are inserted or withdrawn from the core to control the rate of reaction, or to halt it.
- Lubricant: lubricant has shown that it is possible to produce materials capable of lubricating some reactor components. In order to further the development of such lubricants the U.K.A.E.A. and the nuclear manufacturing groups have co-operated in providing lubricant manufacturers.

87. Answer: b

Explanation:

The correct answer is Potassium Nitrate.

Explanation:

- The major composition of **Gunpowder** includes **Potassium nitrate** , Carbon and Sulfur. Hence, Option 2, **Potassium Nitrate** is the correct answer.
- The standard composition of Gun powder is 75% potassium nitrate, 15% charcoal or carbon and 10% sulphur. The formula is well accepted and is known for ages as one which will produce a powerful black powder.
- The sulfur and charcoal act as fuels while the potassium nitrate is an oxidizer.

88. Answer: c

Explanation:

There are three organs of government:

Legislature	Lok sabha and Rajya Sabha at the centre. Legislative assembly and legislative council at the state.
Executive	President, prime minister and his council of ministers at the centre level. Governor, chief minister and his council of ministers at the state level.
Judiciary	Supreme court

Whereas Media is not included as an organ of government. It is not formally recognized as a part of a political system, it wields significant indirect social influence.

Hence, 2 is the correct answer.

89. Answer: d

Explanation:

- The 'vas deferens' is a long, muscular tube that travels from the epididymis into the pelvic cavity, to just behind the bladder. Hence, 3 is the correct answer.
 - The vas deferens transports mature sperm to the urethra, the tube that carries urine or sperm to outside of the body, in preparation for ejaculation.
 - Sperm duct is also known as vas deferens. They transport sperms into penis. They also collect fluids secreted by different glands. These secretions are rich in proteins to enrich the sperms.
-

90. Answer: a

Explanation:

- Xylem is one of the two types of transport tissue in vascular plants, phloem being the other. The basic function of xylem is to transport water from roots to shoots and leaves, but it also transports nutrients.
- Companion cells are not a constituent of Xylem. Companion cells are a type of cell found within the Phloem of flowering plants. They are not found in Xylem.
- Its function is uncertain, though it appears to regulate the activity of the adjacent sieve element and to take part in loading and unloading sugar into the sieve element.

Constituents of Xylem	Function
Tracheids	These are the tubular structure that helps in vertical transportation of minerals and water in the plants.
Xylem parenchyma	These are permanent tissues that help in the conduction of water sideways.
Vessels	A vessel element or vessel member (trachea) is one of the cell types found in xylem, the water conducting tissue of plants.
Xylem fibres	These fibres are highly hygroscopic and they can absorb and store plenty of water.

Hence, 2 is the correct answer.

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91. Answer: b

Explanation:

- Ministry of Housing and Urban Poverty Alleviation (MoHUPA) was introduced in June 2015, an interest subsidy scheme called Credit Linked Subsidy Scheme (CLSS) under Pradhan Mantri Awas Yojana (URBAN)-Housing for all.
- This is implemented for purchase/construction/extension/improvement of house to cater Economical Weaker Section (EWS)/Lower Income Group (LIG)/Middle Income Group (MIG)
- The Centre approved the enhancement of the carpet area of houses for the middle-income group (MIG) category under the Pradhan Mantri Awas Yojana-

Urban (PMAY-U).

- The carpet area of the houses has been enhanced from 90 Sq.mtr to 120 Sq.mtr, while under the MIG-II segment, it has been increased to 150 Sq.mtr from the current 110 Sq.mtr.
- For the MIG-I category, a four-per cent interest subsidy is provided to the beneficiaries with an annual income of Rs 6-12 lakh on a loan of up to Rs 9 lakh. Hence, the answer is option 2.

92. Answer: a

Explanation:

- The interest of **China** to conduct large-scale projects have also affected the field of high technology. To conduct a comprehensive medical and scientific research, it has created a DNA database of 80 million people. Hence, 3 is the correct answer.
- The first stage involved the collection and storage of 80 million DNA samples. The next stage will be implemented by DNA sequencing (the formal description of the structure of the molecule) at a rate of up to half a million samples per year.
- Scientific data resulting from research will be used to study the effect of environment on the organism, the study of the problems of mutation, the genotype's influence on the health of the offspring and to fight dangerous diseases.

93. Answer: b

Explanation:

- India is likely to achieve strong growth over the next decade and will overtake Japan in nominal GDP by 2028 to emerge as the World's third largest economy says a foreign brokerage report. Hence, 3 is the correct answer.

- Falling dependency ratios, financial maturity and increasing incomes and affordability are the three key drivers for the country to stand among the large emerging economies.
 - India has already overtaken Brazil and Russia to emerge as the second largest BRIC economy after China: Bank of America Merrill Lynch report.
-

94. Answer: c

Explanation:

- The Haj subsidy was a subsidy that was given to Indian Muslim Hajj pilgrims by the Government of India in form of discounted Air fares on Indian Government owned Air India. Hence, 1 is the correct answer.
 - The Union Ministry of Minority Affairs has decided to end 'Haj subsidy' from this year as a part of its policy to empower minorities with dignity and without appeasement.
 - This decision was taken based on the recommendations of 'Afzal Amanullah Committee' and May 2012 Supreme Court order.
 - Union Government had constituted committee headed by former secretary Afzal Amanullah to suggest framework for new Haj policy for 2018-22. The committee had recommended for gradual withdrawal of Haj subsidy. It also had recommended to allow older Muslim women to travel to haj without male guardians.
-

95. Answer: d

Explanation:

- Frequency = Speed of sound/Wavelength
- Speed of sound = 360 m/s
- Wavelength = 5 m
- Frequency = $360/5 = 72$ Hz

Hence, option 4, **72Hz** is the correct answer.

96. Answer: a

Explanation:

The correct answer is as well as pressure is high.

Explanation:

- In physics, the sound is a vibration that typically propagates as an audible wave of pressure, through a transmission medium such as a gas, liquid or solid.
 - The sound waves are generated by a sound source, such as the vibrating diaphragm of a stereo speaker. The sound source creates vibrations in the surrounding medium, the vibrations propagate away from the source at the speed of sound, thus forming the sound wave.
 - Wave's features: Compression is a high-density part of the wave (the part where the slinky is compressed). It is the peak of the wave. A rarefaction is a low-density part of the wave (the part where the slinky is most spread out). This is the trough of the wave.
 - Compression is a region in a longitudinal wave where the particles are closest together creating both density and pressure high. Hence, 1 is the correct answer.
-

97. Answer: c

Explanation:

The correct answer is Humus.

★ Key Points

- Humus is a dark, organic matter that forms in soil when a plant or living matter decays .
- Humus is formed by the decomposing action of soil microorganisms (e.g., bacteria and fungi), which break down animal and vegetable material into elements that can be used by growing plants .
- Humus is an important biological constituent of fertile soil.
- It contains many useful nutrients for healthy soil. One of the most important is nitrogen . Nitrogen is a key nutrient for most plants.
- Agriculture depends on nitrogen and other nutrients found in humus.
- When humus is in soil, the soil will crumble, and water moves easily through the loose soil so that oxygen can reach the roots of plants .
- When people compost , they collect decaying organic material , such as food and garden scraps , that turned into soil, It produces Humus in soil.

98. Answer: c

Explanation:

- Both B and C statements are correct. Hence, 3 is the answer.
- The 2017 Mexican Grand Prix (formally known as the Formula 1 Gran Premio de México 2017) was a Formula One motor race held on 29 October 2017 at the Autódromo Hermanos Rodríguez in Mexico City. Red Bull Racing driver Max Verstappen won the race.
- In 2017, Per Mertesacker was the manager of the Premier League team Arsenal.
- The Women's World Chess Championship 2017 was a 64-player knock-out tournament, to decide the women's world chess champion. The final was won by Tan Zhongyi over Anna Muzychuk in the rapid tie-breaks.

99. Answer: b

Explanation:

- JavaScript often abbreviated as JS, is a high-level, interpreted programming language.
 - It is a language which is also characterized as dynamic, weakly typed, prototype-based and multi-paradigm.
-

100. Answer: d

Explanation:

The **7th edition** of the **Rashtriya Sanskriti Mahotsav** was held in **Bengaluru, Karnataka** from 14 January to 20 January 2018 under the ' **Ek Bharat Shreshtha Bharat**' spirit to celebrate unity in diversity.

Prepp

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